The total number of species described up to date is six hundred and ten, which is described as follows:

		Genera.	Species.	
BATRACHIA.	(Urodela	. 6	15)	120
	Gymnophiona	. 4	7 }	
	(Anura	. 31	98)	
	Crocodilia	. 2	3)	488
		104 14	28	
	Lacertilia	. 42	183	
	Ophidia	. 92	274)	

On motion of Dr. Brinton it was

Resolved. The expediency of preparing and printing a Dictionary of the Lenni Lenâpé language, based on that of the Rev. David Zeisberger, and thus completing the presentation of that language, begun in our Transactions in 1827 by our former President, Peter Stephen Duponceau, be referred to the Publication Committee, with instructions to report at the first regular meeting in January, 1885.

Pending nominations Nos. 1031, 1032 and new nomination No. 1033, were read, and the meeting was adjourned.

Stated Meeting, November 21, 1884.

Present, 15 members.

President, Mr. FRALEY, in the Chair.

- An acknowledgment of the receipt of Proceedings Nos. 112, 114, 115 was received from the Royal Zoölogical Society of Amsterdam.

A letter of envoy was received from the Librarian of the University of California.

A letter was received from the United States Department of the Interior, offering copies of the Blue Book, or Official Register of the United States.

A circular invitation was received from the Natural History Society at Bamberg, to assist at the celebration of its Fiftieth Anniversary, on November 8, 1884.

1884.1

Donations for the Library were received from Mr. Paul Albrecht, of Brussels; the Geographical Society at Paris; Royal Academy of History at Madrid; Royal Meteorological and Astronomical Societies of London; London Nature; the Boston Society of Natural History; Science Record; New York Meteorological Observatory; American Journal of Pharmacy; Mr. Henry Phillips, Jr.; the Maryland Historical Society; Johns Hopkins University; United States Fish Commission; United States Department of the Interior; Kansas State Historical Society, and University of California.

The death of Eli K. Price, senior Vice President of the Society, at his residence, in South 15th street, Philadelphia, on the 11th inst., in the 88th year of his age (born July 20, 1797),

was announced.

The following contributions to the Society were read:

1. Notes on the Geological Structure of Tazewell, Russell, Wise, Smyth, and Washington counties, of Virginia, by John J. Stevenson, Professor of Geology in the University of New York, with seven cross sections and a geological map.

Mr. Lesley remarked that-

This memoir was a continuation of Prof. Stevenson's description of the Geology of Southwestern Virginia, read before the Society, August 20, 1880, January 21, 1881, and October 7, 1881; but without further reference

to the economics of the region.

The absence of the Chemung

The absence of the Chemung and Portage and Genesee formations VIII f, e, d, from long outcrops in Lee, Wise and part of Scott counties (although the Chemung is present on Indian creek, &c. further east); the absence of the coarser members of the Hamilton VIII e, and the Marcellus VIII b, so that only 900 feet of black slate is left; the absence of the Upper Helderberg VIII a, Oriskany VII, Lower Helderberg VI, and Onondaga V b—leaving merely the Clinton V a, and Medina IV b, c, which, however, thin out and disappear themselves, but in a southeasterly direction—are facts of importance to the proper understanding of the original source, or rather sources of our Palæozoic deposits.

The logical discussion of facts relating to the anomalous salt and gyp-sum deposits along the Holston, at Saltville and elsewhere, is specially valuable. The independence of the gypsum clays as regards the Palæozoic floor-rocks on which they rest, and the evident erosion of the gypsum before the deposit of the blue clay, upon which again the Mastodon conglomerate lies, are important steps of an argument resulting in a theory

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that the gypsum is not older than Tertiary times, and that it owes its origin (as in the Great Salt Lake of Utah) to the meeting of two systems of drainage waters, one from a region furnishing an abundance of lime water, and the other from a region furnishing an abundance of copperas water.

This memoir is not only valuable for its new facts, but for its correction of mistakes made by me in my survey of the region in 1870. A re-survey of any geological field by another, or by the same competent geologist, is sure to produce such results; and the "constants of science" can only be obtained by this process of reiteration. My mistake of identifying the fault at Saltville with the Walker mountain fault is a case in point. Prof. Stevenson shows their distinction.

The total absence of the Catskill formation No. IX, and the nearly total absence of the Pocono formation No. X, two formations measuring together in Middle and Eastern Pennsylvania at least 8000 feet, is worthy of especial notice, as it goes far to confirm the apparent lack of IX and thinness of X at no great distance behind the Allegheny mountain in western Pennsylvania. As we know nothing of the south-eastern limit of these formations, and merely see them at their last outcrop growing thicker in that direction, and also north-eastward, the idea of a closed basin, however large—perhaps extending to Scotland—may challenge respectful consideration.

On motion, the Secretaries were authorized to publish a colored map of the district like that in Vol. XIX, page 219.

- 2. The Limits of Stability of Nebulous Planets, by Prof. Daniel Kirkwood.
- 3. On the Genealogy of the Vertebrata, and the Theory of Degradation as demonstrated by it, by Prof. E. D. Cope.

The minutes of the last meeting of the Board of Officers and Members in Council were read, and on motion the recommendations therein contained were approved and adopted.

- 1. Resolved, That the Proceedings be hereafter published quarterly, or oftener, at the discretion of the secretaries.
- 2. Resolved, That all members not paying an annual contribution be charged one dollar annually for the printed Proceedings.

It was explained that the Post-Office laws of the United States require not only a quarterly issue, but a bona fide subscription list, for placing any printed matter under the head of third-class matter.

The Secretaries will not only make this notification and explanation, but will send a circular letter to such members of the Society soliciting their assent.

3. Resolved, That the Indian Picture Rock be obtained at a total cost not exceeding \$50 for purchase, preparation and transportation.

4. That an appropriation of two hundred and seventy-five dollars (\$275) be made for heliotype views of the Society's Hall, within and without, to illustrate the forthcoming Volume I, Part i, Proceedings of the Society from 1744 to 1837.

5. That a circular letter be sent to members, urging them to take measures for the preservation of the monuments of antiquity in their several

localities.

6. That it is not expedient for the Society to take any part in the proposed American Exhibition in London in 1886.

The alterations made in the garrets of the Hall for purposes of storing and arranging the Society's stock of publications, were reported and approved, and the meeting was adjourned.

Stated Meeting, December 5, 1884.

Present, 13 members.

President, Mr. FRALEY, in the Chair.

Letters accepting membership were received from Judge Jas. R. Ludlow, Prof. G. vom Rath, Dr. A. S. Gatschet, and Rev. Dr. H. C. Trumbull.

Letters of acknowledgment were received from the Societas Floræ et Faunæ Fennica, at Helsingfors (107, 108, 113), asking for back numbers; from the London Royal Society (XVI, i; 112, 113, 114); from the Verein für Vaterländische Naturkunde at Stuttgart (XVI, i; 112–114); and from De Lau & Co., London (see MS. Minutes).

A letter proposing exchange of duplicates was received from

the Mercantile Library.

Letters of envoy were received from the Meteorological Office of the Royal Society, London, and the Society at Helsingfors.

Donations to the Library were received from the Royal Academies at Berlin, Turin, Modena, London and Edinburgh; the Observatories at Adelaide, Oxford and Brussels; the Geologi-